

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Winston-Salem Regional Office
County: Guilford
NC Facility ID: 4100977
Inspector's Name: Robert Barker
Date of Last Inspection: 03/02/2015
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): City of High Point - Eastside Wastewater Treatment Plant Facility Address: City of High Point - Eastside Wastewater Treatment Plant 5898 Riverdale Drive Jamestown, NC 27282 SIC: 4952 / Sewerage Systems NAICS: 22132 / Sewage Treatment Facilities Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			Permit Applicability (this application only) SIP: 15A NCAC 2Q .0513 NSPS: N/A NESHAP: N/A PSD: N/A PSD Avoidance: N/A NC Toxics: N/A 112(r): N/A Other: 40 CFR Subpart LLL (Federally Enforceable Only)						
Contact Data			Application Data						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center; padding: 2px;">Facility Contact</th> <th style="text-align: center; padding: 2px;">Authorized Contact</th> <th style="text-align: center; padding: 2px;">Technical Contact</th> </tr> <tr> <td style="padding: 2px;"> Terry Houk Director of Public Services (336) 883-3215 PO Box 230 High Point, NC 27261 </td> <td style="padding: 2px;"> Terry Houk Director of Public Services (336) 883-3215 PO Box 230 High Point, NC 27261 </td> <td style="padding: 2px;"> Terry Houk Director of Public Services (336) 883-3215 PO Box 230 High Point, NC 27261 </td> </tr> </table>	Facility Contact	Authorized Contact	Technical Contact	Terry Houk Director of Public Services (336) 883-3215 PO Box 230 High Point, NC 27261	Terry Houk Director of Public Services (336) 883-3215 PO Box 230 High Point, NC 27261	Terry Houk Director of Public Services (336) 883-3215 PO Box 230 High Point, NC 27261	Application Number: 4100977.14A Date Received: 03/20/2014 Application Type: Modification Application Schedule: TV-1st Time Existing Permit Data Existing Permit Number: 08074/R09 Existing Permit Issue Date: 03/31/2015 Existing Permit Expiration Date: 04/30/2022		
Facility Contact	Authorized Contact	Technical Contact							
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Total Actual emissions in TONS/YEAR:									
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP		
2013	1.13	12.63	1.63	7.27	0.6600	1.21	0.6695 [Dichlorobenzene(p), 1,4-]		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top; padding: 2px;"> Review Engineer: Lori Ann Phillips Review Engineer's Signature: _____ Date: _____ </td> <td style="width: 50%; vertical-align: top; padding: 2px;"> Comments / Recommendations: Issue: 08074/R10 Permit Issue Date: _____ Permit Expiration Date: _____ </td> </tr> </table>								Review Engineer: Lori Ann Phillips Review Engineer's Signature: _____ Date: _____	Comments / Recommendations: Issue: 08074/R10 Permit Issue Date: _____ Permit Expiration Date: _____
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1. Purpose of Application:

The City of High Point – Eastside Wastewater Treatment Plant (Eastside WWTP) submitted permit application 4100977.14A, which was received on March 20, 2014 at the Raleigh Central Office. This application is for the wastewater treatment plant located at 5898 Riverdale Drive in Jamestown, Guilford County, NC and requests the change of the facility's status from a Synthetic Minor facility to a Title V facility due to the applicability of 40 CFR 62 Subpart LLL (Federal Plan Requirements for Sewage Sludge

Incineration Units Constructed On or Before October 14, 2010). Subpart LLL requires an affected facility to submit a Title V permit application by March 21, 2014 and to meet the sulfur dioxide (SO₂) emission limit prior to the compliance deadline of March 21, 2016. The facility was issued an updated State permit, revision R09 issued on March 31, 2015, for replacement of a scrubber that would help to meet the SO₂ limit requirement and construction of a new carbon adsorption unit to comply with emissions standards for PM, SO₂, CO, HCl, and Hg.

2. Facility Description:

The facility is a wastewater treatment plant with a design capacity of 26 million gallons per day. The unit operations include screening, grit removal, primary clarification, activated sludge process, secondary clarification, biological nutrient removal operations (nitrogen and phosphorous removal), effluent filtration, ultraviolet disinfection, post aeration and solids handling (dewatering and incineration), and odor control.

The facility's sludge incinerator (ES-01) has been down for maintenance for over a year. A new replacement scrubber and a carbon adsorption system have been constructed. The facility plans to commence operation and complete performance testing on the system in mid-August 2016. In the meantime, the facility's sludge has been hauled offsite via trucks for disposal.

3. Application Chronology:

March 20, 2014	Received permit major modification application at RCO. Application included the following: authorized signature, forms, check for \$904. Application was deemed complete.
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4. New Equipment/Changes in Emissions and Regulatory Review:

New Equipment:

There is no new equipment associated with this permit application.

Change in Emissions:

There are no changes in emissions associated with this permit application. The facility was issued an updated permit in March of 2015 that included the replacement of a scrubber and the addition of a carbon adsorption system in order to maintain compliance with the emissions limits set forth in Federal Plan Subpart LLL.

Regulatory Review:

There are no major changes to the regulations that affect Eastside WWTP. Since the facility will no longer have a Synthetic Minor permit, the Synthetic Minor permit stipulation has been removed. All of the limitations, recordkeeping, and reporting from the Synthetic Minor stipulation will no longer apply now that the facility will have a Title V permit.

The following regulations apply to the following equipment. Compliance with these regulations has previously been shown; therefore, the details of each regulation will not be discussed here. If needed, more information can be found in previous permit reviews.

- A. Fluidized bed sewage sludge incinerator (ES-01): 2D .0516, 2D .0521, 2D .0524 Subpart O, 2D .0611, 2D .0613, 2D .1110 Subparts C & E, 2D .1204, 2D .1806, 2Q .0317, 40 CFR Part 503 Subpart E, and 40 CFR Part 62 Subpart LLL (Federally Enforceable Only)***.

*** A note regarding 40 CFR 62 Subpart LLL. An update to the existing Emissions Guidelines for Subpart LLL was issued in the Federal Register on April 29, 2016. The action finalized the federal plan for existing sewage sludge incineration units. The action implements the emissions guidelines adopted on March 21, 2011 in states that do not have an approved state plan in place by the effective date. The effective date of Federal Rule is May 31, 2016 and North Carolina does not have a State Plan in place. Therefore, the placeholder stipulation for 40 CFR 62 Subpart LLL shall remain in the new Title V permit. The permittee shall be responsible for maintaining compliance with all dates, limits, testing, recordkeeping, and reporting found in the plan.

- B. One sand storage silo (ES-02): 2D .0515, 2D .0521, and 2D .0611.
- C. Three No. 2 fuel oil-fired dual use generators (ES-03, ES-04, and ES-05: 2D .0516, 2D .0521, 2D .0613, 2D .1111 Subpart ZZZZ, and 2Q .0317.

5. Changes to Permit:

- Updated all dates and permit revision numbers. Converted the permit format from a State permit to a Title V permit.
- Removed the Synthetic Minor permit stipulation and all associated operation restrictions, recordkeeping, and reporting requirements.
- Removed 2D .0605 as that permit condition is found in Section JJ of the General Conditions.
- Updated the 2D .1111 Subpart ZZZZ permit stipulation to the most current version.
- Removed 2D .1806 odor control requirements as wastewater treatment plants are exempt from this rule.

6. NSPS, NESHAPS, MACT, PSD, and Attainment Status:

Eastside WWTP's sludge incinerator (ES-01) is subject to NSPS Subpart O (Standards of Performance for Sewage Treatment Plants) and Subpart LLL (Federal Plan Requirements for Sewage Sludge Incineration Units Constructed On or Before October 14, 2010). The incinerator is also subject to NESHAP Subpart C (National Emission Standard for Beryllium) and NESHAP Subpart E (National Emission Standard for Mercury). The facility's diesel-fired emergency generators (ES-03, ES-04, and ES-05) are subject to MACT Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines).

Eastside WWTP has requested that a PSD Avoidance condition (2Q .0317) be placed in their permit to avoid applicability of PSD for NO_x emissions. The facility has an operating restriction for their dual use generators (ES-03, ES-04, and ES-05) where the actual hours of operation, combined, shall be less than 7,400 hours per consecutive 12-month period. No changes to their permit stipulation have been made with this permit application.

Eastside WWTP is located in Guilford County, which is in attainment for PM₁₀ and ozone.

7. Facility Wide Air Toxics:

The 2D .1100 and 2Q .0711 requirements for toxics were removed from the facility's permit during the March 2015 R09 modification. Because the facility's incinerator (ES-01) is subject to Part 61 NESHAP, it is exempt from air toxics permitting in accordance with 2Q .0702(a)(27)(A). In accordance with the R09 review and discussion regarding air toxics and updated modeling that had been submitted at that time, no unacceptable risk to human health was suggested. No further air toxics evaluation is required at this time.

8. Compliance Status:

The facility was in compliance during the most recent inspection conducted on March 2, 2015 by Robert Barker of the Winston-Salem Regional Office. Mr. Barker intends to conduct the next inspection at the time of performance testing of the sludge incinerator, tentatively scheduled for August 2016.

9. Facility Emissions Review:

The emissions summary in the table below is based on the summary from the R09 permit review. The actual emissions are for calendar year 2013, as reported during the facility's 2013 air emissions inventory.

Facility Emissions Summary

Pollutant	Potential Emissions (with control) tpy	Actual Emissions tpy
TSP	7.19	0.66
PM-10	6.49	0.66
PM-2.5	6.44	0.55
SO₂	3.97	1.13
NO_x	< 250	12.63
CO	61.4	7.27
VOC	5.95	1.63
Lead	0.00072	0.00005
GHG as CO₂e	38335	3716

Single HAP (dichlorobenzene(p), 1,4-	3.15	0.67
Total HAP	< 25	1.21

10. Other Considerations:

- A P.E. seal is NOT required for this application.
- A zoning consistency determination is NOT required for this application.
- This facility is not subject to the 112(r) program as it does not store any of the listed chemicals in quantities above the program thresholds.

11. Public Notice Review:

A 30-day public notice and 45-day EPA review period is required for this permit renewal.

The 30-day public notice period was from XX through XX.

The EPA 45-day review period was from XX through XX.

12. Conclusions, Comments, and Recommendations:

This air permit application for the City of High Point – Eastside Wastewater Treatment Plant, located at 5898 Riverdale Drive in Jamestown, NC, has been reviewed by DAQ to determine compliance with all procedures and requirements. The Winston-Salem Regional Office has made comments on the draft permit. Continued compliance with this air permit is expected. Recommend issuance of revised air permit No. 08074T10.